5

10

15

## IRRIGATION SOLUTION AND METHOD FOR INHIBITION OF PAIN AND INFLAMMATION

## Abstract of the Disclosure

A method and solution for perioperatively inhibiting a variety of pain and inflammation processes at wounds from general surgical procedures including oral/dental procedures. The solution preferably includes at least one pharmacological agent selected from the group consisting of a mitogen-activated protein kinase (MAPK) inhibitor, an α<sub>2</sub>-receptor agonist, a neuronal nicotinic acetylcholine receptor agonist, a cyclooxygenase-2 (COX-2) inhibitor, a soluble receptor and mixtures thereof, and optionally additional multiple pain and inflammation inhibitory agents at dilute concentration in a physiologic carrier, such as saline or lactated Ringer's solution. The solution is applied by continuous irrigation of a wound during a surgical procedure for preemptive inhibition of pain and while avoiding undesirable side effects associated with oral, intramuscular, subcutaneous or intravenous application of larger doses of the agents.